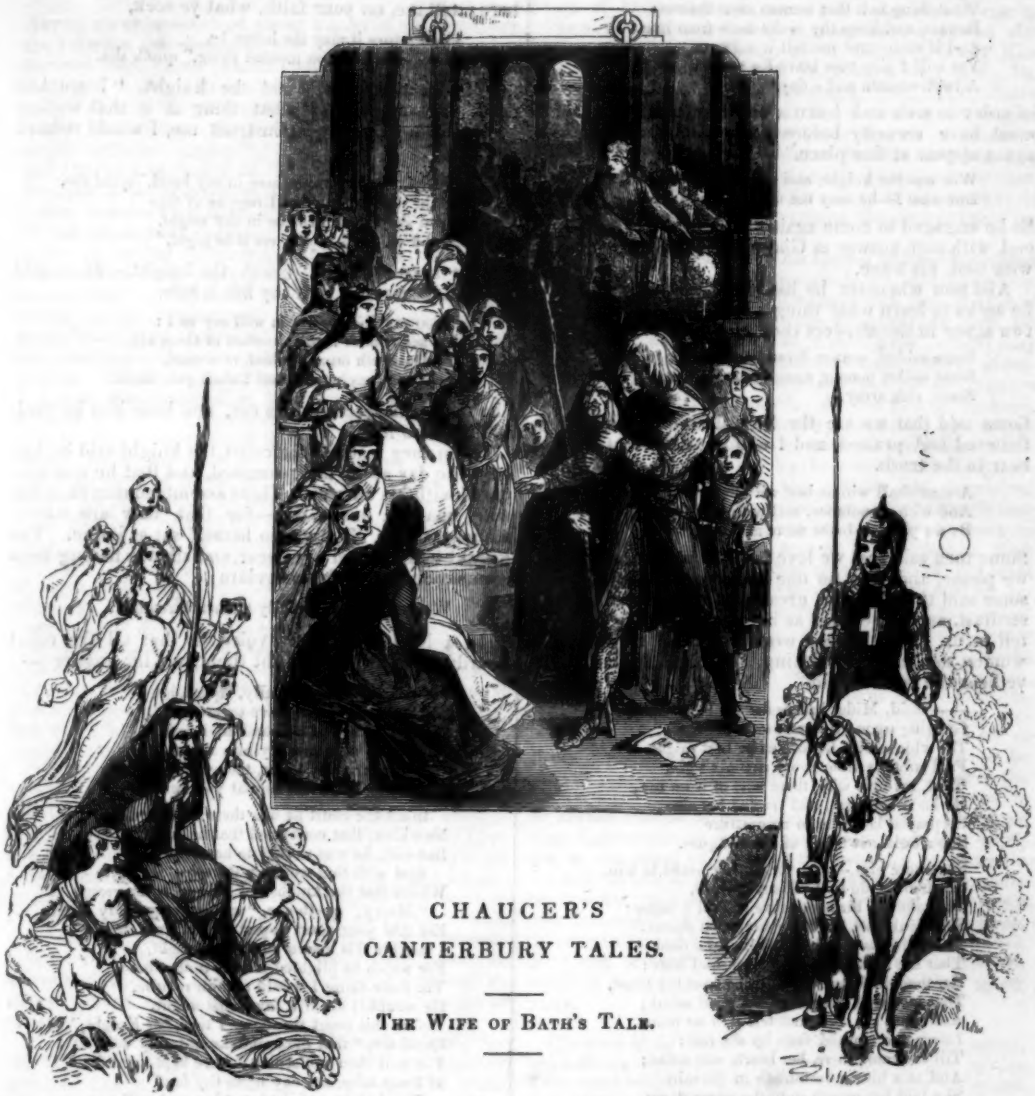

CHAUCER'S CANTERBURY TALES.

The Wife of Bath's Tale.

In the olden days of King Arthur, this land was full of fairies, and

The Elf-queen, with her jolly company,
Dancèd full oft in many a greene mead.
This was the old opinion as I read;
I speak of many hundred years ago;
But now* can no man see none elves mo;
For now the greate charity and prayéres
Of limitours, and other holy freres,
That searchen every land, and every stream,
As thick as motès in the sunne-beam,
Blessing halles, chambers, kitchenes, and bowers,
Cities and boroughs, castles high and towers,
Thorpes† and barnes, sheepenes,‡ and dairies,
This maketh that there be no fairies,
For there as wont to walken was an elf,
There walketh now the limitour himself,
In undermeales,* and in morrownings,†
And saith his matins and his holy things,
As he goeth in his limitatioun.‡
Women may now go safely up and down,
In every bush and under every tree,
There is none other incubus but he,
And he ne will do them no dishonour.

And it so befel, that this King Arthur had in his court a knight, a bachelor, who having grossly ill-treated a maiden, was brought before the king, and condemned in due course of law to death. The queen and other ladies, however, prayed very earnestly to the king for his pardon, who consented to place him in the queen's hands that she might save him or execute him as she pleased. The queen then said to the knight, "Thou standest yet in such a position, as to have no surety of thy life; but

* It will be remembered that it is the Wife of Bath who is speaking, and in the fourteenth century.

† Villages, or other small places ‡ Stables.

* Supposed by Tyrwhitt to refer to the period immediately following dinner. † Mornings.

‡ The part in which the friar or limitour is licensed to beg.

I grant thee life, if thou canst tellen me
What thing is it that women most desiren:
Beware, and keep thy necke boue from iron.
And if thou canst not tell it me anon,
Yet will I give thee leavè for to gone
A twelvemonth and a day,

in order to seek and learn a sufficient answer. And I must have security before you depart, that you will again appear at this place."

Woe was the knight, and sorrowfully he siketh;*
But what?—he may not do all as him liketh;

So he engaged to come again to the court at the year's end, with such answer as God would permit, and therewith took his leave.

And now wherever he has any hope to find favour, he seeks to learn what thing women love most, but no two agree in the answers they give him.

Some saiden, women loven best richéss,
Some saiden honour, some saiden joliness,
Some, rich array.

Some said that we are the best pleased in heart when flattered and praised, and I will not deny that they go near to the truth.

A man shall win us best with flattery;
And with attendance, and with business,
Be we ylimèd, bothe more and less.†

Some men said that we love best to be free, and act as we please, and that no one reprove our faults. And some said that we have great delight to be considered stedfast, and secret, and as betraying nothing that men tell to us. But that is a worthless tale. Certainly we women can conceal nothing. Witness Midas. Will ye hear the tale? Ovid

—— Said, Midas had under his longe hairs,
Growing upon his head two asses' eares;
The whiche vice he hid, as he best might,
Full subtilely from every mannes sight,
That, save his wife, there wist of it no mo;
He lov'd her most, and trusted her also;
He prayèd her, that to no creâture
She n'ould not tellen of his disfigure.

She swore him,—nay, for all the world to win,
She n'oulde do that villany one sin,
To make her husband have so foul a name:
She n'ould not tell it for her owen shame.
But natheless her thoughte that she died
That she so longe should a counsel hide;
Her thought it swelled so sore about her heart,
That needely‡ some word her must astart;
And since she durst not tell it to no man,
Down to a marais§ faste by she ran;
Till she came there, her hearte was a-fire;
And as a bittern bumbleth in the mire,
She laid her mouth unto the water down.

"Bewray me not, thou water, with thy soun,"
Quod she; "To thee I tell it, and no mo,
My husband hath long asses' eares two.
Now is my heart all whole, now is it out,
I might no longer keep it, out of doubt."

Full sorrowful was the knight in spirit, when he saw that he could not discover what he wanted, but he goes toward home, for the appointed day is come. In his way, he happened to ride by the side of a forest, where he saw a party of ladies dancing. Eagerly he went toward them, in hope of learning some wisdom applicable to his situation; but before he reached the spot, the dancers had vanished, he knew not whither.

No creâture saw he, that barè life,
Save on the green he saw sitting a wife;
A fouler wight there may no man devise.

She rose, and said, "Sir Knight, there lieth no way here; tell me, on your faith, what ye seek,

Peráventure it may the better be,
These olde folk con muchel thing," quoth she.

"My dear mother," said the knight, "I am but dead, if I cannot say what thing it is that women desire most. Could you instruct me, I would reward you well."

"Plight me thy troth, here in my hand," quod she,
"The nexte thing that I require of thee
Thou shalt it do, if it be in thy might,
And I will tell it you, ere it be night."

"Have here my troth," quoth the knight. Then said she, "I dare vaunt that thy life is safe.

Upon my life the queen will say as I:
Let see, which is the proudest of them all,
That weareth on a kerchief, or a caul,
That dare say nay of that I shall you teach."

She then whispered in his ear, and bade him be glad, and have no fear.

When they reached the court, the knight said he had kept the day as he had promised, and that he was prepared with his answer. There assembled many a noble wife, many a maid, and—for that they are wise—many a widow. The queen herself sat as judge. The knight was ordered to appear, and silence having been commanded, was told to declare

What thing that worldly women loven best.

In a loud and manly voice, so that all the court heard his words, the knight then gave his answer:—

"My liege lady, generally," quoth he,
"Women desiren to have sovereignty,
As well over their husband as their love,
And for to be in mastery him above.
This is your most desire, though ye me kill;
Do as you list, I am here at your will."

In all the court ne was there wife ne maid,
Ne widow, that contráried that he said,
But said, he was worthy to have his life.
And with that word up start this olde wife
Which that the knight saw sitting on the green.
"Mercy," quoth she, "my sovereign lady queen,
Ere that your court depart, as doth me right.
I taughte this answer unto this knight,
For which he plighted me his trothe there,
The firste thing I would of him require,
He would it do, if it lay in his might.
Before this court then pray I thee, Sir Knight,"
Quod she, "that thou me take unto thy wife,
For well thou wot'st that I have kept thy life:
If I say false, my nay upon thy fay."
This knight answér'd, "Alas, and well-a-way,
I wot right well that such was my behest.
For Goddes love, as choose a new request:
Take all my good, and let my body go."
"Nay then," quod she, "I shrew us bothe two:
For though that I be olde, foul, and poor,
I n'oulde for all the métal ne the ore,
That under earth is grave, or li'th above,
But if thy wife I were, and eke thy love."

"My love," quoth he, "nay, rather my curse!
Alas! that any of my nation
Should ever so foully disparáged be."

But all in vain are his lamentations:

The end is this, that he
Constrained was: he needes must her wed,
And take this olde wife.

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* Sigheth.
† That is to say, both high and low,—or rich and poor.
‡ Of need, necessarily. § Marsh.

MECHANICS' INSTITUTES.

After an experience of about a quarter of a century, the benefits, the pleasures, and the moral advancement derived from these institutions, can be no longer a matter of doubt. In every town of England, Scotland, and Wales, and in very many places that rank scarcely higher than villages, they are now established and in active operation, conveying to the intelligent mechanic and artisan knowledge of the most varied kinds, from the most abstruse sciences to the most popular philosophy, withdrawing them from the debasing influence of the pot-house, rescuing them from the corroding waste of mental indolence, and banishing ennui and tedium from their solitary and social hours. That this success has been attained has in a great measure been owing to the fundamental principle laid down by the great founder of these institutions, Dr. Birkbeck, and his associates, that they should be entirely self-supported. Upon this principle the London Mechanics' Institute was founded, in 1823, the first in England, and the parent of a numerous progeny. For two-and-twenty years it has pursued its useful course, unassisted, except by the advance, by the benevolent founder, of the large sum of 3700*l.* for building expenses, but for which the Institution has paid interest; and of the principal they have paid off the sum of 1350*l.* During this time the number of subscribers has varied from a thousand to fifteen hundred, until within the last two or three years, in which the number has rapidly declined to about six hundred; owing chiefly, as the committee of the Institute are disposed to think, to the great depression in trade. But they add that, "in addition to the above-mentioned primary cause, the system of retrenchment, which it was necessary to pursue in order to keep the expenses within a limited income, has acted as an impediment to the restoration of the Institute to its former state of prosperity.

"'But, perhaps (says the Report presented to the members by a special committee, appointed in the course of last year to consider the state of the Institution), no part of the Institution has suffered more from the want of funds than the library. Scarcely any sums have been set apart during the past six years for the purchase of the many new works issued from the press in every department of science and literature; while the most popular works in the library have become deteriorated through use and other circumstances attendant upon a continued circulation among so many persons, and subject to such frequent change of readers.'

"'Another cause (continues the Report) assigned for the decreased number of subscribers, is the want of accommodation in the reading-room, and your committee are of opinion that the Institution is, in this respect, much inferior to several others of a similar character which have of late years been established in the Metropolis.'

"The inconvenient size of the reading-room has always been a just source of complaint on the part of the members, who are desirous of perusing the works contained in the library on the premises, as the present room will not conveniently contain more than thirty or forty individuals—a tithe only of those who may be expected to attend when the Institution is in a flourishing state: but the heavy expenses which had been sustained in building the Lecture-theatre, &c., would not have justified the managers, even in prosperous times, in incurring further responsibilities by constructing a more capacious reading-room."

To remedy these evils a meeting was held at the Institute on the 7th of May, to consult as to the means to be pursued. Lord Brougham, the friend and associate of Dr. Birkbeck in his earliest efforts, and the earnest advocate of general education and the diffusion of knowledge wherever and whenever it can be effectually advocated, was in the chair, and was ably supported by the Bishop of St. David's, Lords Kinnaird and Dudley Stuart, W. Ewart, Esq. M.P., Dr. Southwood Smith, Basil Montagu, Esq., and others. We cannot attempt to detail the proceedings or to give even a sketch of the eloquent speeches of, particularly, the chairman and the Bishop of St. David's; but they resulted in an appeal to the public for some assistance, which was responded to in the room to the amount of 360*l.*, Prince Albert being among the contributors for the sum of 20*l.*

It is not intended by this appeal to the public that the Institution should relinquish its distinguishing characteristic of being self-supporting, that it should look to patronage for a feeble existence, or seek for more than a little kind and friendly aid in what may be fairly considered an accidental misfortune. Moreover, the London Mechanics' Institute is and always has been peculiarly situated. As the first of its kind, its institution was necessarily tentative. It began upon a moderate scale and without ambitious aims. The attempt was received by the public with the greatest encouragement, and the system has developed itself into almost colossal greatness. But though successful beyond all expectation in its results, the success has been more plentifully reaped by the public than by itself. Other institutions of a like kind, not rival but at least similar institutions, rapidly sprung up around it; and while Liverpool and other provincial towns have each organized one large Institute, meeting in a noble building, furnished with an extensive library and other fitting accompaniments, London, with a number of useful though small establishments, sees the parent hive of them all labouring under distress, occasioned in part by its having thrown off so many successive swarms. It is, perhaps, not to be imagined that *one* Institute can be made to serve the congregated mass now known as London: the mechanic or artisan cannot be expected or even desired to come from Greenwich, or Kensington, or Wapping, or Chelsea, to the heart of the city to spend his evenings in the acquisition of knowledge that may almost as easily be brought to his own door, but at least something may and ought to be done, and we trust will be done, to re-animate and sustain the stock whence so much good has proceeded, and which, from the locality in which it is situated, is yet capable of effecting much more.

Character of the Camel.—I spoke, awhile ago, of the patient, long-suffering expression of the camel's face; but your opinion of the camel will, I think, change, as mine did, upon further and more intimate acquaintance. The truth is, he is but an ill-conditioned beast after all. What you took for an expression of patience becomes one of obstinate, stupid, profound self-sufficiency. There is a vain wreathing of the neck, a self-willed raising of the chin on high, a drooping of the lack-lustre eye, and sulky hanging of the lower lip, which, to any who have faith in the indications of countenance and action, betoken his real temper. Then that very peculiar roar of his, discordant beyond the roar of any other beast, which continues during the process of his being loaded, from the moment that the first package is girded on his back to when he clumsily staggers up upon his feet to begin his lazy journey, is a sound betraying more of moral degradation than any I ever heard from any other four-legged animal: a tone of exaggerated complaint and of deep hate, which the shape of his open mouth well assorts with. The dromedary is said to be to the camel what the thorough-bred horse is to the hack. But he who has ridden a dromedary will never again profane the qualities of the thorough-bred horse by using his name in any such company. The dromedary, it is true, is lighter than the camel, and capable of going much faster; but in temper and spirit he differs from him in nothing but in being even more obstinate.—*Lord Nugent's Lands Classical and Sacred.*

LOCOMOTION OF ANIMALS.—No. XV.

Flying consists in the power which many animals possess of raising themselves in the air, and in moving through it in various directions, supported by the atmosphere alone.

We have seen in the article on Swimming, that man and many of the lower animals are very nearly equal in weight to an equal bulk of river water; consequently, a man's weight is very nearly, or quite supported, when he is immersed in water. But the case is widely different when he is in the air, as the density of this is to that of water very nearly as 1¼ to 1000; hence it follows that a man should be $\frac{1\frac{1}{4}}{1000}$ less in weight than he is at present, in order that he might be supported in the air with as little effort as he is in water. The physical constitution of the air is also very different from that of water, and presents other obstacles to the efforts of a man to raise himself in that medium.

The air is compressible, and consequently much heavier near the surface of the earth than it is in the elevated regions of the atmosphere; and it appears from numerous experiments that, as the height increases in an arithmetical, the density decreases in a geometrical, progression. Thus, supposing an animal to ascend in the air 3½, 7, 14 miles, the density at the surface, being unity, would decrease in the ratio of the numbers ½, ¼, ⅛; so that if the animal were as light as the air itself at the surface of the earth, it would continually increase in weight with respect to it, as it ascended, and could not be supported unless a force equal to the difference between the weight of the animal and its own bulk of air were properly applied for that purpose.

It appears from an elaborate investigation of M. Chabrier, that the quantity of force expended, if the weight of the body be called W, is proportioned to $\sqrt{W^3}$ directly, and inversely as the square root of the density of the air.

There are various methods of ascertaining that the air diminishes in weight as we ascend in it. We know that the barometer falls when taken to the top of an elevated hill; and it is owing to this circumstance that the barometer is used to measure the heights of mountains. The difference between the specific gravity of air, and that of most animals, is so great, that there are but a few species amongst the whole range of the mammalia that are capable of flying, and these possess very modified organs for that office.

Attempts have been made to construct mechanism that would enable man to propel himself in the air, and fly by means of his muscular movements. This, however, is not likely ever to be effected, in consequence of the great weight of his body with respect to that of the air which it displaces. We know that when adventurous persons have descended from the car of a balloon by means of a parachute, the surface of the latter which is presented to the wind must be very great to prevent too rapid a descent. The unfortunate termination of the life of Mr. Cocking arose from his not having estimated more accurately the quantity of surface, and, consequently, the strength of material that was necessary to prevent his falling with too great velocity. Indeed, we may dismiss the subject of a man attempting to fly by the application of his muscular force to any machinery at present known: but, seeing how extremely difficult it is for any heavy body to be supported in the air, much more to fly, it must be a matter of curiosity at least, to inquire into the means employed by animals which are naturally endowed with the power of flight.

[*Fig.* 1, Kalong Bat.]

Amongst the higher orders of mammalia, we find the *Bats* possessing the greatest power of flight. The figure of the Bat resembles in some degree that of a bird. In order to render it fit for aërial progression, the body is small, and the bones of the skeleton are extremely light. The arms are long, and peculiarly constructed: the fore-arm has its motion restricted to flexion and extension, and cannot rotate upon its long axis like that of a man. This gives the arm a much greater degree of firmness during flight. The hand moves outwards and inwards horizontally, in the same manner as that of birds, and cannot move upwards and downwards on the fore-arm, which would weaken the force of the wing in flight.

The wing of the bat, instead of being clothed, and having its surface increased with feathers, is composed

Fig. 2, Flying Squirrel.]

of a membranous expansion, passing from the neck to the tail. In order to increase the surface of the wing, the bones of the fingers are very long; the thumb is not enclosed in the membrane, but lies in front of the wing, and terminates by a strong hook for prehension. In the bat the area of the wings, with respect to the weight of the body, is very considerable. Indeed the surface exceeds that of many birds. The muscles which move the wings are extremely powerful, and these animals are enabled to keep on the wing during a period of many hours. They appear also to be endowed with an extraordinary and peculiar sensibility, and can fly through an intricate labyrinth, even when deprived of sight. The velocity of some species of the bat tribe is very great. They chase and capture the insects on which they prey, whilst on the wing.

There are some other species of mammalia said to be capable of flying, such as the Galeopithecus, or flying-cat, and the Pteromys Alpinus, or flying-squirrel, but the notion is entirely without foundation. They are certainly provided on each side with an expanded membrane, as seen in *Fig.* 2, but these membranes have by no means the surface requisite to enable them to fly; neither are they capable of moving like the wings of birds. They may be useful as parachutes, to break their velocity of descent in falling or leaping from trees, but could never raise the body again from the ground into the air.

Birds.—Most birds are capable of flight, but their facility of flying varies in different orders, and some, as the ostrich and cassowary, are devoid of the power of flight altogether; but this defect is compensated by their great speed in running, as has been already shown in No. X.

[*Fig.* 3, The Great Ibijau.]

In the ostrich and cassowary the wings are very small, and the body extremely heavy, both which circumstances are unfavourable to flight; but in birds which are endowed with great velocity, the converse of this is found, the body being very light, and the surface of the wings large.

In order to adapt birds for flight, the Creator has bestowed upon them the most refined mechanism. The skeleton is extremely light, and the bones hollow and filled with air: the body is traversed by air cavities. The figure of a bird is such as to present a very small amount of surface to the wind in the direction of its motion, so that during its flight the animal is retarded as little as possible by the resistance of the air. In birds of passage, such as woodcocks, &c., which are known to cross the sea five hundred miles at one flight, Sir George Cayley* found the length of the wing to be three and a half times that of its greatest transverse section. The feathers keep the body warm, and tend to increase its surface, without adding materially to its weight. The muscles which move the wings are very large, and endowed with great power. In some birds they are capable of continued action during many successive days. The figure of the wing is nearly triangular, and the surface decreases as the distance increases from the shoulder joint, which is the axis on which the wing moves (*Fig.* 3). This figure of the wings is of great importance for rapid flight, as it enables the muscles to move them with greater velocity than they could do, if the surface increased with the distance from the body of the bird. The wing is also concave below, and convex above, so that the down is much more effectual than the up stroke. The bones of the fore-arm and fingers which support the wing are jointed, so that the wing unfolds itself outwards horizontally after it has been raised in the air, as in the bats; and by these means the wing is prevented from yielding, both in the up and down stroke, to the resistance of the wind. The tail of the bird performs the office of a rudder, and tends, by its elevation or depression, to elevate or depress the head. The elevation of the tail raises the head, and *vice versa*.

The mechanical effects of the tail will be found demonstrated by Borelli, and also in the 'Cyclopædia of Anatomy and Physiology.'† The tail is also turned obliquely to alter the course of the bird, but the effects of this organ are not very powerful in directing its path to the right or left.

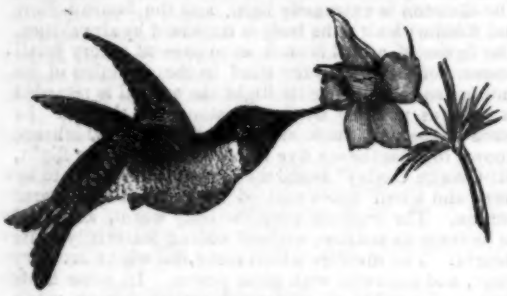
The number of flappings which any bird must make in order to fly, depends on the weight of the bird, the surface of the wings, and the specific gravity of the atmosphere, the earth's gravity being supposed constant at all heights to which any bird ascends. In most of the smaller orders the wings move with very great rapidity; indeed, far too great to enable us to count them by the eye. The wings of the diminutive and beautiful humming-bird oscillate with sufficient rapidity to emit a humming sound; hence its name. If we can be satisfied that it is the number of flappings of the wings which determines the pitch of the sound produced, we have a ready method of ascertaining the number made in a given time, because we can easily find in any work on Acoustics, how many oscillations are necessary to produce the required tone.

The velocity with which any bird moves depends on the number of flappings made by the wing in a unit of time, each flapping being supposed to constitute one elevation and one depression of the wing. It is estimated by M. Chabrier that the swallow expends as much force merely to sustain itself in the air, as would be sufficient to raise its own weight 27.5 feet per second, and that its number of flappings is about 15

* See 'Mechanics' Magazine,' No. 708, March 4, 1837.

† Vol. ii. p. 429.

per second. This estimate of the number of flappings is, however, obviously greater than the bird employs; and notwithstanding all the care and attention which M. Chabrier has bestowed on the subject, it is found that birds fly with much less expenditure of muscular force than would appear to be necessary by mathematical analysis.*



[*Fig.* 4, Humming-Bird.]

The velocity of some birds is very considerable. It has been said that the Eider duck can fly 90 miles in an hour, and the hawk 150 miles in the same time: there is, however, reason to suspect the accuracy of these accounts. With regard to the pigeon the case is different. It is well known that these birds are trained to transmit intelligence on special occasions in which great speed is required; and their velocity has in consequence been more accurately taken. Very recently two trained pigeons were started from Brighton at the same time: one arrived in London in 70 minutes, and the other in 78 minutes. Now, if we estimate the distance traversed by the birds in question at 49 miles, it follows, by the rule of three, that the bird which accomplished the journey in 70 minutes travelled at the rate of 42 miles per hour, and the other at that of 38 miles; and it is probable that the former is about the maximum velocity of the pigeon. It appears that in general pigeons make about 23 flappings of the wing in 5 seconds. The rook, which has a large surface of wings, makes from about 10 to 15 effective strokes in a second.

Some birds, the lark for instance, ascend vertically in a right line into the air to such heights as to become quite invisible, during which movement they pour out their well-known joyous song, so pleasing to the ear in consequence of its peculiar melody, and purity of tone. The warbling of this bird is distinctly heard even when the little songster itself appears in the zenith (owing to its great altitude) as a mere speck.

"Hark! hark! the lark at Heaven's gate sings!"
Cymbeline.

When birds poise themselves in one position in the air, their wings oscillate in very small arcs compared with the arc through which they sweep when in rapid motion.

Many of the small, and indeed some of the larger birds, such, for example, as the woodpecker, move from one place to another by a series of jerks, produced by three or four strokes of the wings made in rapid succession; immediately after which they close their wings, whilst the body is forced forwards like a projectile, in the path of a parabolic curve. Of all known birds, the great condor of South America appears to have the greatest power on the wing. It is said to be capable of elevating sheep and other animals into the air, and of carrying them to the mountains, to feed upon at leisure. The greatest weight it is capable of supporting in the air is not accurately known, but is doubtless very considerable.

* Sir George Cayley has estimated that a force equivalent to one-horse power (raising 550 pounds one foot high in a second), if applied to appropriate machinery, would sustain 115 pounds in the air. This, however, he considers only an approximate value, but perhaps not far from the truth.

WICLIF, THE REFORMER.

(From Rambles by Rivers—The Avon. Weekly Volume.)

The bitterness of his language has been bitterly declaimed against. Placid literary gentlemen, sitting at their ease by the quiet fire-sides of their well-carpeted studies, find his harshness of speech unbearable and indefensible. And indeed it were to be wished that he had spoken of the evil he saw about him and of his adversaries with the meekness of a modern controversialist: but some allowance must be made for the difference of the times; and in truth it must be confessed he was a lion at his gentlest, little likely to "roar you an 't were any nightingale." With him his task was an earnest one, not a struggle for life or death merely,—he had a testimony to deliver, and woe to him if he did not deliver it. He looked on it as a quarrel of more than personal or even temporal interest, and, to use the mighty words of Milton, wanted not that it should be shivered into small fragments and bickerings. And the truth is, no reformer ever did use only mild phraseology; as Luther said of himself in like circumstances, "a man fighting with the devil and his myrmidons, cannot always give soft words." It does seem to me, after reading many books about it, and weighing the matter as well as I am able, that he was in very deed a man of a true and honest heart—a fervent, holy man; and that it was from an earnest depth of character and profound reverence for truth, and not from a cautious "feeling of his way," as has been said, that the progressive development of his views arose. He proclaimed only what he was assured of; but as he saw further, and felt convinced that, by solemn inquiry and sober reflection, he *now* did know more, so he withheld no longer his testimony. How could he? He may have gone too far, he may have been mistaken in some things, but that he sought after the truth, and that he found it, is to me certain.

That he sought the protection of the mighty of the land is true, and yet not marvellous; and, whether right or wrong, is exactly what Luther did after him, and what any wise man would have done in his circumstances, if such protection were to be had. That he shrunk from danger is not true, any more than it would be to say that he ran into it. An enthusiast might do the one, a hypocrite or coward the other: he was neither, and so he neither courted danger nor by falsehood sought to avert it. By some he has been charged with appealing to the people; others have found little more than scholastic subtleties in his writings. One thing is clear, whatever the form, there appeared to be no indecision or indefiniteness in his main views to his contemporaries. On some points it was like enough he was subtle and obscure too. Dr. Lingard, in summing up his character, which he does with the extraordinary fairness that is characteristic of him in all ecclesiastical matters, says, that in regard to the Eucharist "he taught a doctrine similar to the impanation of Luther;" and that when called upon to defend his views thereon, "he intrenched himself behind so many unintelligible distinctions, that it will be difficult for the most acute logician to discover his meaning." Which is quite probable. It would indeed rather surprise one ever so little read in the theology of the period before his time, to discover any one who did not admit the generally received opinion of the church clear the subject from the entanglement of

these scholastic subtleties. A century and a half later it was the rock upon which Luther and his disciples had nearly made shipwreck of their common cause. That he had faults is beyond question, but, as it has been finely said by Southey, "considering the intrepidity and ardour of his mind, it is surprising that his errors were not more and greater. A great and admirable man he was; his fame, high as it is, is not above his deserts; and it suffers no abatement upon comparison with the most illustrious of those who followed in the path which he opened."

Besides his own teaching he insured the propagation of his views by calling in the aid of a number of assistants, his "poor priests" as he called them, and also by the translation of the Old and New Testaments; and these means, no doubt, did more to diffuse his opinions than his own preaching. His New Testament, according to Professor Blunt (a sufficient authority in such a matter), "might at this day be read in our churches without the necessity of many, even verbal alterations; and on comparing it with the authorised version of King James, it will be found that the latter was hammered on Wiclif's anvil."

We may say, indeed, that Wiclif did more than any for several centuries before him to break the fetters from the soul of man; to produce and perfect that spiritual freedom, possessing which alone the human intellect can walk erect. The mighty truth he again proclaimed, that erring man must strive to render to his Maker a reasonable service, and that his Divine Master will stoop to aid him therein if he in faith and humility seek his aid. Obscured as religion had then become with the thick piles of saintly intercession, penances, and money-worship, such an unfolding of the divinity must, one would think, have come to a thoughtful mind as a most sublime revelation; and if to us a still clearer vision has been opened, let us not withhold honour from him who amid the thick darkness sought after and found a way to the heavenly throne, and pointed it out to others, that they too might walk therein. Were I ever so to differ from his opinions, did I hate them even, I think I should still reverence the man.

Like the great accomplisher of the Reformation, which he only commenced, he died in peace. While in the discharge of his ministerial duties he was stricken, and hardly could be conveyed to a chair in his vestry, when his spirit ascended where all is true and clear and blissful. They buried his corpse in the church, and there for some forty years it slept in its quiet bed. But when at Constance that council sat which has crowned itself with eternal infamy by its treacherous murder of Huss and of Jerome, it was ordained that it should rest there no longer. Wiclif's doctrines were condemned, and his body ordered to be exhumed and burnt, "if it could be discerned from those of the faithful." Fuller shall tell the rest:—"In obedience thereunto, Richard Fleming, bishop of Lincoln, diocesan of Lutterworth, sent his officers (vultures with a quick sight sent at a dead carcase!) to ungrave him accordingly. To Lutterworth they come, sumner, commissary, official, chancellor, proctors, doctors, and the servants (so that the remnant of the body would not hold out a bone amongst so many hands), take what is left out of the grave, and burn them to ashes, and cast them into Swift, a neighbouring brook running hard by. Thus this brook hath conveyed his ashes into Avon, Avon into Severn, Severn into the narrow seas, they into the main ocean. And thus the ashes of Wiclif are the emblem of his doctrine, which now is dispersed all the world over." "I know not," says Fuller, in another place, "whether the vulgar tradition be worth remembrance, that the brook into which Wiclif s ashes were poured, never since overflowed the banks." It is worth remembering for one thing at least, as a proof of the estimation in which he was held by the people.

The pulpit from which he preached still stands in the church. It is of oak, rather richly carved, but the carving is almost filled up with thick coats of varnish. Only the body of the pulpit is ancient; the other parts are carved in a kind of resemblance of it, but they are much inferior. A plain old oak chair is also shown as that in which he is said to have died. It stands in the vestry, where is also his table; and on the wall hangs an old velvet robe by time and the worms brought to decay, and not by them alone, for it is enclosed in a glass case to preserve it from human visitors, who generally carried off a fragment. His portrait, too, is there—a grave, venerable head, expressive of much, but wanting the fire that must have been in his eye. Whether it is at all authentic I know not. A few years back the people of Lutterworth erected a memorial to their great rector. It is a basso-rilievo representing him preaching from the altar, and is a work of much merit. The sculptor of it is Mr. Westmacott, jun., and, like all his works, it exhibits the marks of genius, knowledge, and careful thought. The church itself is a large one, but it is much to be regretted that the interior has been at various times altered in such a manner as quite to have changed its character. The only thing that ever appears to have been thought of was to make as many sittings as possible, a matter of course most desirable—particularly if the town was not sufficient for another church—but some regard should have been shown to the preservation of the ancient appearance of such a church. The present tall pews are comparatively recent: there are a few of the first pews in the side aisles which have some carving about them; on one of these I noticed the date 1637.

INSECTS USED AS FOOD.

It is easy to imagine that in circumstances of extreme distress and scarcity of food a man may be driven to make use of expedients for the appeasing of his hunger that at another time would fill him with disgust, but it certainly does excite surprise when we find that through a mere love of novelty, or for the sake of gratifying a pampered appetite, the epicure will sometimes select articles of diet which would seem equally strange and revolting to a well-regulated taste. Thus the Roman epicures were very fond of eating the cossus, or worm of the oak, accounting it one of their greatest dainties; and thus also at the luxurious tables of West Indian epicures, particularly the French, the caterpillar or maggot of the palm-tree is served up as the most inviting morsel of the Western world.

But not only has the extremity of famine, or the false taste of epicurism, led men to the adoption of insect food; there are nations in the world, a considerable portion of whose food consists of insects and their eggs: and when we consider the necessities of the human race in the more inhospitable regions of the earth, it becomes a subject of admiration that it is not with man, as with the lower animals, ordained that some particular class of food shall be his sole nourishment; but that he is left omnivorous; so that throughout the whole zoological system there is scarcely a class from which, either in one or other country, he does not convert some or many of its species to the purpose of wholesome food.

From the recital of travellers we learn that the white ant is commonly eaten by Hottentots near the Cape of Good Hope, by the poorer ranks of people in some parts of the East Indies, and by the inhabitants of various parts of South America. Lieutenant Paterson, speaking of the Hottentot country, says that he

observed several of the Hottentots and slaves collecting the white-winged ants, with which their country abounds; and on inquiry, he found that they were intended for food. This traveller, indeed, is of opinion that Europeans are unreasonably prejudiced against this kind of food; for having been compelled during his journeys in that country to make occasional use of it, he found it "far from disagreeable."

Smeathman, speaking of the same kind of diet, informs us that the African mode of collecting and cooking the insects is to skim off from the waters with calabashes the ants that, at the time of swarming or of emigration, fall into them; and then bringing them to their habitations, to parch them in iron pots over a gentle fire, frequently stirring them, as if they were roasting coffee. In that state, without any addition, the natives consider them a delicious food, and put them by handfuls into their mouths. Our traveller states that he ate them several times cooked in this way, and thought them delicate, nourishing, and wholesome. Some gentlemen with whom he conversed respecting this diet spoke of it as delicious, one comparing it to sugared marrow, another to sugared cream, or a paste of sweet almonds. Baron de Geer, without describing the mode of cookery, mentions the fact of the Hottentots using these insects as a common article of diet, and says that they grow fat upon them.

An essay on these insects was read before the Society of Naturalists of Berlin by Mr. König, in which he states that in some parts of the East Indies the queen-termes is swallowed alive by old men for strengthening the back; and that by certain fetid fumigations the ants are expelled from their nests, and collected in vast quantities. Of these insects the inhabitants make with flour a variety of pastry, which they sell at a low price to the poor. This kind of food is extremely abundant, but the inordinate use of it brings on an epidemic colic and dysentery, which occasions death in two or three hours.

The use of the locust* as food is established by the testimony of the earliest historians and travellers. From the period of that express permission given in the Scriptures (*Levit.* xi. 22) to eat "the locust after its kind," down to the present time, this insect appears to have formed an important article of food in many parts of the East. There is therefore little reason for endeavouring to explain away, as some writers have done, the simple announcement of Scripture that the "meat" of St. John in the wilderness consisted of "locusts and wild honey." (*Matt.* iii. 4.) Though not a very nutritious diet, the locust is wholesome, and tolerably palatable. Some of the ancient authors, in describing this kind of food, give marvellous accounts both of the insect itself and of its effects on those who fed on it. Pliny states that the locusts of India are three feet long, and that their dried legs and thighs are used by the people as saws! Diodorus Siculus, speaking of the Acridophagi, or locust-eaters of Ethiopia, says that they lived only forty years, for that insects with wings were generated under the skin, causing intolerable itchings; and the sufferer, having torn them out with his nails, at last died in miserable tortures. Herodotus describes the locust as being dried in the sun, ground to powder, and eaten with milk by the Nasamones, a nation of Libya.

It is well known that in Persia, Arabia, Syria, Egypt, Barbary, Ethiopia, and even in some of the southern countries of Europe, locusts have been and are still eaten. In some places they are fried until the wings and legs drop off, and in that state are sold in the markets, and eaten with rice and dates, sometimes flavoured with salt and spices: in others they are broiled or baked in an earthen pan, being caught for that purpose in large numbers in nets. In the markets of Arabia salted locusts are common. But the methods of cooking the insect are various: they are ground in hand-mills, made into cakes, and baked; or they are broiled, boiled in milk, fried in oil, or roasted alive. When fried they turn reddish, like shrimps, and taste like cray-fish. While in Persia, Sir John Chardin saw the air darkened by them as if by clouds. Prodigious numbers, and of a very large size, fell to the ground, and the peasants gathered them up, dried and salted them, and used them as common food. This was in March, and the people told him that at that season such clouds appeared almost every evening. In some parts of Barbary the locusts are three inches long, and extremely voracious. In Morocco they are said to be so highly esteemed, that the price of provisions falls when locusts have entered the neighbourhood. The Calmucks do not use them as food, but they prize highly the antelopes, sheep, and other animals which have been fattened upon them. The wolves seldom or never attack the flocks of the Calmucks when the locusts are at hand to appease their hunger. At Sarepta some hogs became unusually fat by having fed for some time entirely upon dead locusts which had been drowned in the Volga, and thrown in heaps upon the shore.

Steedman, travelling in the interior of Southern Africa, observed the Hottentots feeding fowls with locusts out of a large sack, and was surprised to see with what avidity they devoured them. The game birds shot in that part of the country had also a strong disagreeable flavour, in consequence, as was supposed, of feeding on these insects. The Hottentots and Bushmen esteem the locust most highly when plump and full of eggs: they make a brown soup of them, and appear to thrive on this diet.

But although locusts are esteemed as excellent food by nations whose supplies of provisions are not always abundant, yet it does not appear that they are nutritious enough to support the constitution for any considerable time in a state of vigour. It is said that those who feed almost entirely upon them become at last very weak, thin, and indolent. In this state of health they are evidently predisposed to a complaint which is said to arise from the pestilential effluvia of these insects when they swarm in any country and lie long upon the ground.

Thus it appears that if various species of insects are used as food by mankind, the custom is comparatively so rare, and the circumstances under which it has prevailed are so peculiar, and, in most cases, so evidently arise out of the low scale of civilization and consequent limited resources of the people adopting it, that we must still conclude that insect diet is generally and naturally obnoxious to the taste of man, and frequently injurious in its effects on the human constitution. Could the poor, indolent, and degraded Hottentot be roused to sufficient energy and exertion to secure to himself the ordinary comforts of life, we should soon find him abandoning a sort of diet which nothing probably but his own improvident habits, and the state of destitution in which he consequently finds himself, would ever have induced him to resort to. As respects the assertion that he grows fat on this kind of diet when used in moderation, we should rather incline to the opinion that he grows fat in spite of it, and in consequence of the indolence which forms the prevailing feature in his character.

* The natural history of the locust is given in the 'Penny Magazine,' No. 115; and an account of the locust swarms of Asia in No. 719.